CONTENTS

JULY

EDITORIAL: Receptors and transmembrane signalling: cellular and molecular aspects of anaesthesia 1
M. J. Halsey, C. Prys Roberts and L. Strunin

SYMPOSIUM ON CELLULAR AND MOLECULAR ASPECTS OF ANAESTHESIA

Neuronal sodium and potassium channels: structure and function 2
K. T. Wann

Effects of i.v. anaesthetics on human brain sodium channels 15
C. Frenkel, D. S. Duch and B. W. Urban

Differential effects of gaseous and volatile anaesthetics on sodium and potassium channels 25
B. W. Urban

Structure and function of calcium channels and the actions of anaesthetics 39
D. A. Terrar

Effects of volatile anaesthetics on second messenger Ca^{2+} in neurones and non-muscular cells 47
H. G. Kress and P. W. L. Tas

Effects of general anaesthetics on ligand-gated ion channels 59
S. Daniels and E. B. Smith

Selective actions of volatile general anaesthetics at molecular and cellular levels 65
N. P. Franks and W. R. Lieb

Adrenoceptors as models for G protein-coupled receptors: structure, function and regulation 77
D. A. Schwinn

Signal transduction: G proteins and second messengers 86
D. G. Lambert

Effects of anaesthetics on uptake, synthesis and release of transmitters 96
R. Griffiths and R. I. Norman

Alpha$_2$ adrenoceptor agonists and anaesthesia 108
Y. Hayashi and M. Maze

Opioid receptors and their relevance to anaesthesia 119
B. J. Pleuvry

GABA receptors and benzodiazepines 127
C. S. Goodchild

Excitatory and inhibitory synaptic mechanisms in anaesthesia 134
G. Pocock and C. D. Richards

Central neuronal pathways and the process of anaesthesia 148
A. Angel

CORRESPONDENCE

Bedside APTT and PT monitoring 164
Sore throat after suxamethonium 164
Respiratory depression after extradural fentanyl 164
Neuromuscular block and insertion of the laryngeal mask airway 166
Preoperative fasting guidelines for cataract surgery under regional anaesthesia 167
Fasting before anaesthesia 167
Anaesthesia for nasotracheal intubation in dentistry 167
Thrombelastography in the management of cardiopulmonary bypass for a patient with reduced prothrombin conversion because of a rare familial haemostatic defect 168
Laryngeal spasm 168
Face masks and anaesthesia 169
Arterial pressure measurement in pregnancy 169
Thoracic electrical bioimpedance or thermodilution for measurement of cardiac index 170
Long-term backache after extradural or general anaesthesia for manual removal of placenta 171
Post-spinal headaches in parturient women 171
Kinked inner tube of coaxial breathing system 171
Transfusion for war wounded 172
The reinforced laryngeal mask airway in paediatric radiotherapy 172
Use of the laryngeal mask airway in children with laryngotracheal pathology 172

BOOK REVIEWS

Outcome After Anaesthesia and Surgery 174
Congrès National d'Anesthésie et de Réanimation: Conférences d'Actualisation 1992 174
Post Operative Critical Care of the Massachusetts General Hospital 174
Critical Care of the Burned Patient 175
Acute Pain: Mechanisms and Management 175
Psychology, Psychiatry and Chronic Pain 175
Principles and Practice of Pain Management 176

AUGUST

EDITORIAL: Postdural puncture headache and extradural blood patch 179
L. E. S. Carrie

ORIGINAL ARTICLES

Magnetic resonance imaging of extradural blood patches: appearances from 30 min to 18 h 182
S. C. Beards, A. Jackson, A. G. Griffiths and E. L. Horsman

Nitrous oxide elimination and diffusion hypoxia during normo- and hypoventilation 189
S. Einarsson, O. Stenqvist, A. Bengtsson, E. Houltz and J. P. Bengtson

Measurement of breath-by-breath gas exchange during general anaesthesia 194
P. C. W. Beatty, M. J. Beech and T. E. J. Healy

Time course of primary and secondary hyperalgesia after heat injury to the skin 201
S. Møiniche, J. B. Dahl and H. Kehlet

Teaching fibreoptic nasotracheal intubation with and without closed circuit television 206
J. E. Smith, S. G. Fenner and M. J. King

Respiratory sinus arrhythmia: an index of light anaesthesia 212
C. J. D. Pomfrett, J. R. Barrie and T. E. J. Healy

Natural killer cell activity and lymphocyte subpopulations during dobutamine infusion in man 218
Y. Nomoto, H. Jhonokosi and S. Karasawa

Time course of neuromuscular effects and pharmacokinetics of rocuronium bromide (Org 9426) during isoflurane anaesthesia in patients with and without renal failure 222
R. A. Cooper, V. R. Maddineni, R. K. Mirakhur, J. M. K. H. Wierda, M. Brady and K. T. J. Fitzpatrick

Pharmacodynamics of mivacurium chloride in patients with hepatic cirrhosis 227
J. C. Devlin, A. G. Head-Rapson, C. J. R. Parker and J. M. Hunter

Pharmacodynamics of mivacurium in children, using a computer-controlled infusion 232
O. A. Meretoja and K. T. Olkkola

Effect of preoperative i.m. administration of diclofenac on suxamethonium-induced myalgia 238
S. Kahraman, S. Ercan, U. Aypar and K. Erdem

Accelerated contractures after administration of ryanodine to skeletal muscle of malignant hyperthermia susceptible patients..... 242
C. Lenzen, N. Roewer, F. Wappler, J. Scholz, J. Kahl, M. Blank, E. Rumberger and J. Schulte am Esch

Isoflurane reduces microtubule-associated protein 2 degradation compared with halothane during forebrain ischaemia in the rat 247
T. Sugaya and Y. Kitani

Enflurane increases the adrenaline threshold for the development of slow responses in isolated canine trabeculae 253
S. Oshita, H. Oka and T. Sakabe

Effect of diabetes mellitus on the cardiovascular responses to induction of anaesthesia and tracheal intubation..... 258
A. Vohra, S. Kumar, A. J. Charlton, A. O. Olukoga, A. J. M. Boulton and D. McLeod

A new method of measuring cardiac output in man using lithium dilution 262
R. A. F. Linton, D. M. Band and K. M. Haire

Effect of bolus doses of midazolam on intracranial pressure and cerebral perfusion pressure in patients with severe head injury 267
L. Papazian, J. Albanese, X. Thirion, G. Perrin, O. Durbec and C. Martin

Cerebrovascular carbon dioxide reactivity during exposure to equipotent isoflurane and isoflurane in nitrous oxide anaesthesia 272
S. Strebel, M. Kaufmann, M. Baggi and U. Zenklusen

Does correction of acidosis influence microcirculatory blood flow during cardiopulmonary bypass? 277
J. Boldt, C. Knothe, B. Zickmann, H. Hammermann, W. A. Stertman and G. Hempelmann

REVIEW ARTICLE

Effect of renal failure on drug metabolism by the liver .. 282
A. C. Elston, M. K. Bayliss and G. R. Park

SHORT COMMUNICATIONS

Effects of different doses of thiopentone on the increase in serum myoglobin induced by suxamethonium in children 291
I. Noguchi, G. Suzuki and Y. Amemiya

I.v. clonidine for post-extradural shivering in parturients: A preliminary study 294
G. Capogna and D. Celleno

CASE REPORTS

Delayed surgical emphysema, pneumomediastinum and bilateral pneumothoraces after postoperative vomiting 296
W. G. M. Bremner and C. M. Kumar

Pulmonary embolus and patent foramen ovale: a rare cause of refractory hypoxaemia 298
C. Brydon, W. J. Fawcett, T. Treasure and J. T. Clarke

Multiple coronary artery dissections in a woman at term. 301
A. P. K. Verkaaik, W. Visser, J. W. Deckers and F. K. Lotgering

APPARATUS

Flow reversal through a Mark III halothane vaporizer .. 303
A. S. Gregg, R. S. Jones and S. L. Snowdon

ABSTRACTS

Proceedings of the Anaesthetic Research Society, Newcastle upon Tyne Meeting, April 2–3, 1993 ..... 305P

CORRESPONDENCE

Perioperative seizures and fluvoxamine 321
Tracheal intubation without neuromuscular block 321
Heparin contamination of specimens collected from arterial cannulae 322
Effect of PEEP on hyperinflation 322
Premedication before cardiac surgery 323
Peripheral nerve injury caused by injection needles 323
Reduction of dopamine release and postoperative emesis by benzodiazepines 325
Onset of block with vecuronium and body mass index .. 325
A tracheal tube protector to prevent kinking 326
A simple indicator for identifying the extradural space .. 326
Haemodynamic effects of propofol 326
Pharmacokinetic modelling of mivacurium 328

BOOK REVIEWS

Life Threatening Problems in the Emergency Room: Problems in Anaesthesia 330
Cancer Pain 330
A Practice of Anesthesia for Infants and Children, 2nd Edn. 330
Anatomy for Anaesthetists, 6th Edn 331
MCQ Tutor in Basic Sciences for Anaesthesia 331

Errata 331

SEPTEMBER

EDITORIAL: Predicting difficult intubation 333
M. E. Wilson

ORIGINAL ARTICLES

Mandibulohyoid distance in difficult laryngoscopy 335
H.-C. Chou and T.-L. Wu

Perioperative monitoring with pulse oximetry and late postoperative cognitive dysfunction..... 340
J. T. Moller, I. Svennild, N. W. Johannessen, P. F. Jensen, K. Espersen, J. S. Gravenstein, J. B. Cooper, M. Djernes and S. H. Johansen

Uteroplacental and fetal circulation during extradural bupivacaine–adrenaline and bupivacaine for Caesarean section in hypertensive pregnancies with chronic fetal asphyxia 348
S. Alahuhta, J. Räsänen, P. Jouppila, R. Jouppila and A. I. Hollmén

Respiratory sinus arrhythmia: a new, objective sedation score 354
D. Y. Wang, C. J. D. Pomfrett and T. E. J. Healy

Pilot study of an expert system adviser for controlling general anaesthesia 359
S. G. Greenhow, D. A. Linkens and A. J. Asbury

Towards a standardized anaesthetic state using isoflurane and morphine 366
H. M. Robb, A. J. Asbury, W. M. Gray and D. A. Linkens

New patch delivery system for percutaneous local anaesthesia 370
D. F. McCafferty and A. D. Woolson

Dermal anaesthesia: comparison of EMLA cream with iontophoretic local anaesthesia..... 375
S. Irsfeld, W. Klement and P. Lipfert

Effect of metoclopramide on renal vascular resistance index and renal function in patients receiving a low-dose infusion of dopamine..... 379
J. Munn, M. Tooley, S. Bolsin, I. Hronek, S. Lowson and J. Willcox

Comparison of CNS effects of propofol and thiopentone in cats 383
K. Tomoda, K. Shingu, M. Osawa, M. Murakawa and K. Mori

Effects of sedation produced by thiopentone on responses to nasal occlusion in female adults 388
T. Nishino and T. Kochi

Prolonged paralysis after long-term, high-dose infusion of pancuronium in anaesthetized cats 393
R. H. Henning, M. C. Houwertjes, A. H. J. Scaf, A. den Hertog and S. Agoston

Solubility characteristics of the ideal agent for measurement of cardiac output by soluble gas uptake methods 398
R. R. Kennedy and A. B. Baker

Analysis of uncertainty in theoretical methods of cardiac output measurement using the "Monte Carlo" technique 403
R. R. Kennedy and A. B. Baker

Phenotypes associated with malignant hyperthermia susceptibility in swine genotyped as homozygous or heterozygous for the ryanodine receptor mutation 410
J. E. Fletcher, P. A. Calvo and H. Rosenberg

Presurgical analgesia in children subjected to hypospadias repair 418
M. M. Atallah, M. M. A. Saied, R. Yahya and A. M. Ghaly

REVIEW ARTICLES

Hyaluronidase 422
D. Watson

Interpleural analgesia 426
D. F. Murphy

SHORT COMMUNICATIONS

Patient-controlled analgesia with a mixture of morphine and droperidol 435
S. K. Sharma and M. W. Davies

Pharmacokinetics of glycopyrronium in uraemic patients 437
M. Kirvelä, T. Ali-Melkkilä, T. Kaila, E. Iisalo and L. Lindgren

Synergism between atracurium and vecuronium in children 440
O. A. Meretoja, B. W. Brandom, T. Taivainen and L. Jalkanen

Relationship between post-tetanic twitch and single twitch response after administration of vecuronium .. 443
Y. Saitoh, H. Toyooka and K. Amaha

Effect of age on extradural dose requirement in thoracic extradural anaesthesia 445
Y. Hirabayashi and R. Shimizu

Actions of the hypnotic anaesthetic, dexmedetomidine, on noradrenaline release and cell firing in rat locus coeruleus slices 447
C. M. Jorm and J. A. Stamford

Discrepancy between the development of tolerance to bupivacaine in extradural and spinal anaesthesia in rabbits 450
E. Golomb, L. Langerman and S. Benita

APPARATUS

Accuracy of 94 anaesthetic agent vaporizers in clinical use 453
J. Nielsen, F. M. Pedersen, F. Knudsen, M. B. Jensen and M. Ibsen

CORRESPONDENCE

Pre-emptive analgesia—use of immediate early genes expression as markers of neuronal stimulation 458
Influence of cardiac output on the correlation between mixed venous and central venous oxygen saturation... 459
Pipecuronium-induced prolongation of vecuronium block 459
Effect of nitrous oxide on cerebral blood flow 460
Software safety considerations in the use of closed-loop, patient-connected control systems 461
A simple aspiration test can detect tourniquet failure during i.v. regional anaesthesia 462
Central venous cannulation in paediatric patients 463
Efficacy of continuous intercostal bupivacaine for pain relief after thoracotomy 463
Whole bowel irrigation in acute poisoning 464

BOOK REVIEWS

Case Presentations in Anaesthesia and Intensive Care 465
The History of Anesthesia: Third International Symposium Proceedings 465

OCTOBER

EDITORIALS: I. Regional analgesia and myocardial ischaemia 467
C. S. Reilly
II. Conscious levels during anaesthesia .. 469
R. S. Cormack

ORIGINAL ARTICLES

Myocardial ischaemia and spinal analgesia in patients with angina pectoris 472
E. F. Christensen, P. Søgaard, K. Egebo, L. F. Bach and J. Riis

Effect of intraoperative inspired gas mixtures on postoperative nocturnal oxygen saturation 476
C. J. Roberts, T. J. Parke and M. K. Sykes

Causes of oxyhaemoglobin saturation instability in the postoperative period 481
P. G. Roe and J. G. Jones

Analysis of factors which affect the relationship between inspired oxygen partial pressure and arterial oxygen saturation 488
P. G. Roe and J. G. Jones

Study of the anatomy of the extradural region using magnetic resonance imaging 495
J. L. Westbrook, S. A. Renowden and L. E. S. Carrie

Single space combined spinal–extradural technique for analgesia in labour 499
R. G. W. Stacey, S. Watt, M. Y. Kadim and B. M. Morgan

Effects of giving water 20–450 ml with oral diazepam premedication 1–2 h before operation 503
E. Søreide, H. Holst-Larsen, K. Reite, H. Mikkelsen, J. A. Søreide and P. A. Steen

Pharmacokinetics and effects of i.m. alfentanil as premedication for day-case ophthalmic surgery in elderly patients 507
M. Virkkilä, T. Ali-Melkkilä, H. Soini and J. Kanto

Skin conductance responses to auditory stimuli and anticipatory responses before venepuncture in patients premedicated with diazepam or morphine 512
S. M. Geddes, W. M. Gray, K. Millar and A. J. Asbury

Nausea and vomiting after gynaecological surgery: a meta-analysis of factors affecting their incidence 517
C. G. Haigh, L. A. Kaplan, J. M. Durham, J. P. Dupeyron, M. Harmer and G. N. C. Kenny

Power spectral analysis of heart rate variability after spinal anaesthesia 523
M. Kawamoto, N. Tanaka and M. Takasaki

Lack of a ceiling effect for intrathecal buprenorphine on C fibre mediated somatosympathetic reflexes 528
C. Wang, M. K. Chakrabarti and J. G. Whitwam

Lemakalim, a potassium channel agonist, reverses electrophysiological impairments induced by a large dose of bupivacaine in anaesthetized dogs 534
J. E. de la Coussaye, J. J. Eledjam, P. Peray, P. Bruelle, J. Y. Lefrant, B. Bassoul, G. Desch, J. P. Gagnol and A. Sassine

Fentanyl inhibits the uptake of [^{3}H]noradrenaline in cultured neuronal cells 540
R. Atcheson, D. J. Rowbotham and D. G. Lambert

Mechanisms of the relaxant action of ketamine on isolated porcine trachealis muscle 544
L. E. Wilson, D. J. Hatch and K. Rehder

Sevoflurane does not increase intracranial pressure in hyperventilated dogs 551
H. Takahashi, K. Murata and K. Ikeda

Isobolographic and dose–response analysis of the interaction between pipecuronium and vecuronium 556
M. Naguib and M. Abdulatif

REVIEW ARTICLES

Problems associated with tracheal extubation 561
M. Hartley and R. S. Vaughan

Anaesthesia for carotid artery surgery 569
M. A. Garrioch and W. Fitch

SHORT COMMUNICATIONS

Continuous subcutaneous infusion of morphine—an alternative to extradural morphine for postoperative pain relief 580
K. B. Hindsholm, C. Bredahl, M. K. Jensen, L. Kidmose, P. Herlevsen, F. B. Nielsen and A. S. Oleson

Deep body temperature during the warming phase of cardiopulmonary bypass 583
T. Sakuragi, M. Mukai and K. Dan

Haemodynamic effects of propofol during coronary artery bypass surgery 586
A. Pensado, N. Molins and J. Alvarez

CASE REPORTS

Failure to wean from cardiopulmonary bypass after myocardial revascularization: successful treatment with verapamil via the aortic root 589
A. M.-H. Ho, A. Parisi and B. W. Shragge

Surgical emphysema and upper airway obstruction complicating recovery from anaesthesia 592
M. C. Bellamy, J. C. Berridge and S. S. M. Hussain

EQUIPMENT

Resistance to constant air flow imposed by the standard laryngeal mask, the reinforced laryngeal mask and RAE tracheal tubes 594
A. Al-Hasani

COMMENTARIES

Efficacy of therapeutic suggestions presented during anaesthesia: re-analysis of conflicting results 597
K. Millar

Why do anaesthetists need codes? 602
R. M. Tackley, M. E. Stuart-Taylor and M. Hurrell

CORRESPONDENCE

BJA—dangerous at low levels 607
Continuous subdural block 607
Comparison of two measurements 607
Anaphylactoid or carcinoid crisis? 609
"Xylocaine" Spray and laryngeal oedema 610
Hepatotoxicity of volatile anaesthetic agents 610
Pressor response to venous cannulation 612
The management of acute poisoning 613

BOOK REVIEWS

Whose Life Is It Anyhow? 615
Principles and Practice of Medical Intensive Care 615
Effects on the Baby of Maternal Analgesia and Anaesthesia. 615
Percutaneous Local Anaesthesia 616

Erratum 616

NOVEMBER

EDITORIAL: Aspirin-induced asthma 619
I. Power

ORIGINAL ARTICLES

Effects of increasing doses of alfentanil, fentanyl and morphine on mid-latency auditory evoked potentials .. 622
D. Schwender, T. Rimkus, R. Haessler, S. Klasing, E. Pöppel and K. Peter

Mid-latency auditory evoked potentials during ketamine anaesthesia in humans 629
D. Schwender, S. Klasing, C. Madler, E. Pöppel and K. Peter

A measure of consciousness and memory during isoflurane administration: the coherent frequency 633
R. Munglani, J. Andrade, D. J. Sapsford, A. Baddeley and J. G. Jones

Effect of a sub-anaesthetic concentration of halothane on the ventilatory response to sustained hypoxia in healthy humans 642
C. H. Young, G. B. Drummond and P. M. Warren

Comparison of the effects of the laryngeal mask airway and endotracheal intubation on vocal function 648
S. K. Lee, K. H. Hong, H. Choe and H. S. Song

Comparison of 0.125% bupivacaine with 0.125% bupivacaine and clonidine as extradural analgesia in the first stage of labour 651
M. E. O'Meara and T. Gin

Clonidine combined with sufentanil and bupivacaine with adrenaline for obstetric analgesia 657
B. le Polain, M. De Kock, J. L. Scholtes and M. Van Lierde

Comparison of the analgesic effects of intrathecal clonidine and intrathecal morphine after spinal anaesthesia in patients undergoing total hip replacement 661
D. J. Fogarty, U. A. Carabine and K. R. Milligan

Single-dose, randomized, double-blind, double-dummy cross-over comparison of extradural and i.v. clonidine in chronic pain 665
D. Carroll, A. Jadad, V. King, P. Wiffen, C. Glynn and H. McQuay

Comparison of patient-controlled analgesia with and without a background infusion after lower abdominal surgery in children 670
E. Doyle, D. Robinson and N. S. Morton

Effect of alcohol on gastric emptying in volunteers 674
M. C. Mushambi, S. M. Bailey, T. N. Trotter, G. D. Chadd and D. J. Rowbotham

Tropisetron for postoperative nausea and vomiting in patients after gynaecological surgery 677
P. J. W. Zomers, C. J. M. Langenberg and K. M. de Bruijn

Effect of tropisetron, a 5-HT$_3$ receptor antagonist, on analgesia and nausea after intrathecal morphine 681
M. T. Pitkänen, L. Niemi, M. K. Tuominen and P. H. Rosenberg

Double-blind comparison between doxapram and pethidine in the treatment of postanaesthetic shivering 685
P. Singh, V. Dimitriou, R. P. Mahajan and A. W. A. Crossley

Spectral characteristics of embolic heart sounds detected by precordial Doppler ultrasound during venous air embolism in dogs 689
P.-W. Lui, Y.-M. Lin, F. H. Y. Chan, M.-Y. Tsou, S. Wang, F. K. Lam and P. W. F. Poon

Cardiovascular effects of isoflurane and halothane in young and elderly adult patients 696
M. S. McKinney, J. P. H. Fee and R. S. J. Clarke

Dose–response relationship for inhaled nitric oxide in experimental pulmonary hypertension in sheep 702
O. Dyar, J. D. Young, L. Xiong, S. Howell and E. Johns

Dose–response relationships for edrophonium and neostigmine antagonism of mivacurium-induced neuromuscular block 709
M. Naguib, M. Abdulatif, A. Al-Ghamdi, I. Hamo and R. Nouheid

Comparison of propofol with thiopentone for treatment of bupivacaine-induced seizures in rats 715
J. E. Heavner, J. Arthur, J. Zou, K. McDaniel, B. Tyman-Szram and P. H. Rosenberg

Pulmonary vascular effects of trinitroglycerin and isosorbide dinitrate after cardiopulmonary bypass 720
O. Muikku, M. Hynynen, M. Salmenperä, A. Harjula and J. Heinonen

REVIEW ARTICLE

Acute effects of obstructive sleep apnoea 725
R. J. O. Davies and J. R. Stradling

SHORT COMMUNICATIONS

Recovery of atracurium and vecuronium neuromuscular block in the isolated forearm 730
J.-C. Law Min, J. Hood, N. Campkin and S. Feldman

Muscle fibre diameter and sensitivity to neuromuscular blocking drugs 732
C. Ibebunjo and L. W. Hall

Comparison of end-tidal and arterial carbon dioxide measurements during anaesthesia with the laryngeal mask airway 734
I. R. Hicks, N. C. Soni and J. N. Shephard

Effect of atropine on the QT interval and T-wave amplitude in healthy volunteers 736
P. Annila, A. Yli-Hankala and L. Lindgren

CASE REPORT

Norpethidine toxicity and patient controlled analgesia ... 738
P. A. Stone, P. E. MacIntyre and D. A. Jarvis

APPARATUS

Efficiency of breathing systems A and D in the Carden Ventmasta ventilator 741
E. J. Tham, R. Davies, J. M. Slade and W. W. Mapleson

Continuous spirometry: an aid to monitoring ventilation during operation 747
G. I. Bardoczky, E. Engelman and A. d'Hollander

COMMENTARY

Postoperative analgesia in children using continuous s.c. morphine 752
R. McNicol

ABSTRACTS

Proceedings of the Anaesthetic Research Society, Oxford Meeting, July 9–10, 1993 ..... 757P

CORRESPONDENCE

The laryngeal mask for intraocular surgery 772
Tracheal tube cuff inflation as an aid to blind nasotracheal intubation in a patient with cervical spine injury. 772
Use of alfentanil and propofol for difficult tracheal intubation 773
The $P<0.05$ criterion is not inviolable 773
Spinal needle: an unusual complication 773
Analgesia induced by metoclopramide 774
Sore throat after suxamethonium 774
Postdural puncture headache and extradural blood patch 775

BOOK REVIEWS

Les Brûlures 776
Surgical Intensive Care 776
Critical Care Management: Sedation and Analgesia 776
Controversies in Obstetric Anaesthesia 777
Oxford Textbook of Palliative Medicine 777
Collection d'Anesthésiologie et de Réanimation, volume 34: Anesthésie–Réanimation de sujet âgé 777

DECEMBER

EDITORIAL: Neuropathic pain: a condition which is not always well appreciated 779
W. Hamman

ORIGINAL ARTICLES

Awareness during total i.v. anaesthesia 782
R. Sandin and O. Nordström

Re-expansion of atelectasis during general anaesthesia: a computed tomography study 788
H. U. Rothen, B. Sporre, G. Engberg, G. Wegenius and G. Hedenstierna

Fresh gas flow requirements during spontaneous ventilation: fresh gas flow to total ventilation ratio or ml kg^{-1} min^{-1}? 796
N. Soni and R. Ooi

Effect of cricoid pressure on ease of insertion of the laryngeal mask airway 800
J. Brimacombe, A. White and A. Berry

Radiological examination of the intrathecal position of microcatheters in continuous spinal anaesthesia 803
T. Standl and H. Beck

Effect of late posture change on the level of spinal anaesthesia with plain bupivacaine 807
J. Niemi, M. Tuominen, M. Pitkänen and P. H. Rosenberg

Effect of extradural diamorphine on analgesia after Caesarean section under subarachnoid block 810
C. J. Roulson, J. Bennett, M. Shaw and F. Carli

Oral bromfenac 10 and 25 mg compared with sublingual buprenorphine 0.2 and 0.4 mg for postoperative pain relief 814
D. Carroll, T. Frankland, C. Nagle and H. McQuay

Patient-controlled analgesia with low dose background infusions after lower abdominal surgery in children 818
E. Doyle, I. Harper and N. S. Morton

Pharmacokinetics of i.v. and rectal pethidine in children undergoing ophthalmic surgery 823
K. Hamunen, E.-L. Maunuksela, T. Seppälä and K. T. Olkkola

Influence of Crohn's disease on the pharmacokinetics and pharmacodynamics of alfentanil 827
B. J. Gesink-van der Veer, A. G. L. Burm, A. A. Vletter and J. G. Bovill

Electroacupuncture in anaesthesia for hysterectomy 835
P. A. Christensen, M. Rotne, R. Vedelsdal, R. H. Jensen, K. Jacobsen and C. Husted

Effects of small concentrations of isoflurane on some psychometric measurements 839
J. Yoshizumi, R. W. Marshall, L. D. Sanders and M. D. Vickers

Antiemetic efficacy of prophylactic ondansetron in laparoscopic surgery: randomized, double-blind comparison with metoclopramide 845
J. H. Raphael and A. C. Norton

Effect of thiopentone on motor evoked potentials induced by transcranial magnetic stimulation in humans 849
M. Kawaguchi, T. Sakamoto, K. Shimizu, H. Ohnishi and J. Karasawa

Blood loss during repair of craniosynostosis 854
P. Meyer, D. Renier, E. Arnaud, M.-M. Jarreau, B. Charron, E. Buy, C. Buisson and G. Barrier

Postoperative multiple organ dysfunction syndrome associated with gut mucosal hypoperfusion, increased neutrophil degranulation and C1-esterase inhibitor depletion 858
M. G. Mythen, G. Purdy, I. J. Mackie, T. McNally, A. R. Webb and S. J. Machin

Lung management during cardiopulmonary bypass: is continuous positive airways pressure beneficial? 864
C. B. Berry, P. J. Butler and P. S. Myles

Comparison of the haemodynamic effects of enoximone and piroximone in patients after cardiac surgery 869
A. Patel, L. D. Caldicott, J. R. Skoyles, P. Das and K. M. Sherry

Isoflurane inhibits insulin secretion from isolated rat pancreatic islets of Langerhans 873
J. P. Desborough, P. M. Jones, S. J. Persaud, M. J. Landon and S. L. Howell

Effects of fentanyl on the rat aorta are mediated by alpha-adrenoceptors rather than by the endothelium.. 877
F. Karasawa, V. Iwanov and R. F. W. Moulds

Improvement of brain electrical activity during treatment of porcine malignant hyperthermia with dantrolene.... 881
E. Kochs, W. E. Hoffman and J. Schulte am Esch

REVIEW ARTICLE

Anaesthesia of animals for biomedical research..... 885
P. A. Flecknell

SHORT COMMUNICATION

Comparison of propofol with enflurane during hypotensive anaesthesia for middle ear surgery..... 895
J. L. Bembridge, E. Moss, R. M. Grummitt and J. Noble

CASE REPORTS

Complications of tracheotomy..... 898
M. D. Mansfield, G. C. Pugh and M. Brockway

Compartment syndrome after use of an automatic arterial pressure monitoring device..... 902
P. Vidal, P. J. Sykes, M. O'Shaughnessy and K. Craddock

EQUIPMENT

Tracheal intubation in a mannikin: comparison of the Belscope with the Macintosh laryngoscope 905
U. M. Hodges, D. O'Flaherty and A. P. Adams

COMMENTARIES

Plasma drug concentrations: description and interpretation of the biexponential decay 908
V. Nigrovic

Guest Reviewers for 1993 915

CORRESPONDENCE

Prediction of arterial Pco_2 from end-tidal Pco_2..... 917
Suxamethonium day-case anaesthesia 918
Correlation of child's age with infusion rates of mivacurium 919
Fentanyl and the extradural sieve..... 920
IVOX, oxygen balance and the heart..... 920
Venous air embolism with a water jet dissector..... 921
Spin label techniques for detection of malignant hyperthermia..... 921

BOOK REVIEWS

Problems in Obstetric Anaesthetics. Analysis and Management..... 923
Differential Diagnosis of Acute Pain by Body Region..... 923
Manual of Cardiac Anaesthesia..... 923
Resuscitation Handbook..... 924
Baillière's Clinical Anaesthesiology: Anaesthesia and the Geriatric Patient..... 924
Orthopedic Anesthesia..... 924

Erratum..... 925

Index to Volume 71..... 927